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Amdt. dated: 10/31/2005
Reply to Office action of 8/25/2005

REMARKS/ARGUMENTS

A. Restriction Requirement

Applicants note that the Examiner has deemed that the previously provided restriction requirement is proper and has made it final and, as such, has "cancelled" Claims 10-32. Applicants respectfully call the Examiner's attention to the present Office Action, which is not final, and thus request the Examiner to consider Claims 10-32 as "withdrawn" in order to preserve Applicants' right to petition from the requirement under 37 CFR 1.144 (MPEP 818.03(c)).

B. The Claims

In the Office Action, all of the pending claims are rejected under 35 USC § 103(a) (obviousness). Four separate art references are cited in forming the bases of the 103 rejections. The cited references are:

- U.S. Patent Publication No. 2001/0029579; *Information Processing System, Portable Electronic Device, Access Apparatus for the Portable Electronic Device, and Method of Using Memory Space*; Kusakabe et al.; Published October 11, 2001; Priority date of January 7, 2000; Assigned to Sony Corporation (hereinafter *Kusakabe*);
- U.S. Patent No. 6,058,392; *Method for the Organizational Indexing, Storage, and Retrieval of Data According to Data Pattern Signatures*; Sampson et al.; Issued May 2, 2000; Priority Date of November 18, 1996; Assigned to Wesley C. Sampson Revocable Trust (hereinafter *Sampson*);
- U.S. Patent Publication No. 2003/0110388; *Software Protection Device and Method*; Pavlin et al.; Published June 12, 2003; Priority date of December 4, 1996; Assigned to Rainbow Technologies, Inc. (hereinafter *Pavlin*); and

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- U.S. Patent No. 6,665,796; *Microprocessor Instruction Result Obfuscation*; Folmsbee; Issued December 16, 2003; Priority Date of August 18, 1999; Assigned to Sun Microsystems, Inc. (hereinafter *Folmsbee*).

Claims 1 and 8: Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kusakabe* in view of *Sampson*. The Office Action provides that for Claim 1, *Kusakabe* discloses all the elements of the Claim other than a first key field and a second key field, which are said to be disclosed by *Sampson*. The Office Action provides that it would have been obvious to modify *Kusakabe* to include unique keys such as that taught by *Sampson* in order for each user to have a separate key for accessing the application.

Kusakabe describes systems of methods of using an integrated circuit (IC) card for conducting transactions. An issuer key is used to encrypt an access key that is provided to various business organizations and is used for validation as well as access to memory locations on the IC card. In *Kusakabe*, the issuer key is described as follows:

[0040] When issuing the IC card 3, the issuer 5 records an issuer key in the IC card 3. **The issuer key is key information for encryption and decryption, which is specific to the issuer 5 and managed by the issuer 5.** In the IC card system 1, **an access to the IC card 3 is effected using both the issuer key and file key information,** which is key information specific to each of the plurality of business organizations 4A, 4B, etc. Thus, the IC card 3 can be used for the business organizations 4A, 4B, etc. in common under management of the issuer.

And the access key is described as follows:

[0041] The issuer 5 records the issuer key in the IC card 3 by using a management terminal 6 constituted by, e.g., a computer. Also, when the IC card 3 is to be used for services provided by the business organizations 4A, 4B, etc. under contracts between the issuer 5 and the business organizations 4A, 4B, etc., **the issuer 5 creates file registry information and an access key respectively by a file registry information creating unit 7 and an access key synthesizing unit 8 in the terminal 6.** The file registry information and the access key are passed to corresponding one of the business organizations 4A, 4B, etc.

[0042] The file registry information is information used for securing a memory space in the IC card 3 so that each business organization 4A, 4B, etc. can handle

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the IC card 3 for the service provided by itself. Upon receiving the file registry information, the IC card 3 allocates a memory space therein corresponding to the file registry information. **The access key is information used for authentication when an access is made to the allocated memory space.** Eventually, the access key is information used to execute processing of authentication using both the file key information and the issuer key that have been assigned to each business organization.

The relationship between the issuer key and the access key is as follows:

[0048] As shown in FIG. 6, the access key synthesizing unit 8 creates the access key by encrypting the file key with the issuer key in an encryption unit 8A.

The functions of the issuer key and the access key are described as follows:

[0080] In the IC card system 1 (FIGS. 1 to 3) having the above-described construction, the issuer 5 serving as a system management sector issues the IC cards 3 in each of which the issuer key specific to the management sector is recorded.

[0081] Also, the issuer 5 assigns, to each of the business organizations 4A, 4B, etc. which want to provide their services using the IC cards 3, an access key that has been created by encrypting file key information specific to each business organization 4A, 4B, etc. with the issuer key (FIG. 6). Further, in order that the memory space assigned to each business organization 4A, 4B, etc. can be specified by a file, information of both the file name and the file size regarding that file is encrypted by the issuer key to create a check code (FIG. 5). The file registry information containing the check code, the information of both the file name and the file size, as well as the file key information is then provided to each business organization 4A, 4B, etc.

and:

[0084] After the memory space for the business organization has been secured in the IC card 3 as described above, the IC card 3 transmits the random number R (FIG. 9) when an access command is inputted to the IC card 3 from the business organization side. The business organization side encrypts the random number R with the access key and transmits an encrypted data to the IC card 3. The IC card 3 side decrypts the received data with the access key information corresponding to the file name that is affixed to the access command, and then determines whether a restored random number is identical to the transmitted random number R. It is thereby determined

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whether the relevant business organization is a proper one that has been authorized to access the file. **When the relevant business organization is determined to be a proper one, the contents of the file is transmitted to the business organization or updated in accordance with the access command.**

Therefore, *Kusakabe* uses the issuer key that is stored with the IC card to encrypt an access key that is provided to business organizations. The access key is used for authentication purposes to provide the business organization authority to access and/or modify data stored in one or memory locations on the IC card. In other words, the access key as used in *Kusakabe* is a key in the sense that it is used to gain authorized entry to an area with limited and controlled access. The access key is the only key issued to a user that is used for purposes of gaining access to the controlled area.

Sampson, on the other hand, discloses systems and methods of storing and retrieving data. In *Sampson*, an event is broken down into one or more data entry records (a/k/a key fields). *Sampson* provides that "[e]ach individual event further comprises a number of fundamental units of information called **key fields**." [Col. 6, lines 37-39.] *Sampson* defines a data entry record (key field) as follows:

"DATA ENTRY RECORD (KEY FIELD)--a computerized representation of each fundamental unit of information within an event in the form of one line of data in a file or list. The computerized representation of the real world event always contains at least one unit of information, and usually contains more than one. The computerized representation of the event begins with identifying the data entry record(s) within the event." [Col. 5, lines 4-11.]

The information entered into the key field is used to create an index in *Sampson*, as described in the preferred embodiment:

"The computer 104 performs the steps of the method of the present invention under the control of a computer controlled program means located within the computer 104. Referring to FIG. 5, the method of the present invention begins with the start step 38, and then proceeds to the store master list step 40. In the store master list step 40 the master list, which comprises a list of all possible key field values that could appear in the indexes, is stored to memory for later use. FIG. 4d shows a representation of the records of the master list. Each record of the master list contains at least an item 80, and the associated item indicator 92 of the

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item 80 performs as the master list subscript. **The item 80 represents a key field value taken from a data entry record of a data entry record group. Each individual item 80 is then converted to a corresponding item indicator 92 through application of a minimal perfect hash function. The minimal perfect hash function converts the item 80 into a fixed length coded equivalent of the item 80, represented by the item indicator 92. In this manner, each item 80 in the master list maps to a unique fixed length binary coded equivalent item indicator 92. The master list contains at least a listing of all of the items 80 which could possibly appear within a given data set. Upon construction of the indexes of the present invention, the items 80 of the master list function as search sort keys and can be located within the master list through use of the item indicator 92 subscripts. The sort keys will enable selection of items 80 from the master list to allow generating readable reports of searches.**" [Col. 9, line 47 – Col. 10, line 8; emphasis added in bold.]

Therefore, the use of the term "key" in *Kusakabe* is significantly different than the use of the term "key" in *Sampson*. *Kusakabe* uses "key" in the form of a noun, and as a means of gaining or preventing entrance, possession, or control.¹ *Sampson* uses "key" in the form of an adjective, as in important or fundamental.² The key fields of *Sampson* are thus for the entry of text or other information about an event that is later used to create an index.

In order to establish a prima facie case of obviousness, there must be a basis in the art for combining or modifying references (see MPEP 2143.01). Here, the commonality between the two references, *Kusakabe* and *Sampson*, is the term "key;" however, it is apparent that the two references are using completely different definitions of the common term. Applicants therefore respectfully submit that there is no motivation or basis for combining the two references to form an obviousness rejection of Claims 1 and 8 and, as such, no prima facie case of obviousness has been established.

Claim 2: Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Kusakabe* as applied to Claim 1, further in view of *Pavlin*. The Office Action provides that *Kusakabe* does not disclose a developer key, which is disclosed by *Pavlin*, and that it would have been obvious

¹ <http://www.webster.com/cgi-bin/dictionary?book=Dictionary&va=key>, accessed October 28, 2005.

² *Id.*

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to modify *Kusakabe* to include a developer key such as that taught by *Pavlin* for the developer and access key to have distinguishable features such that one cannot be used in the place of the other.

Claim 2 depends from independent Claim 1. As shown above, the combination of *Kusakabe* and *Sampson* is improper in forming the obviousness rejection of Claim 1. Because a dependent claim contains all of the limitations of its base claim, including the key fields of Claim 1, Applicants submit that Claim 2 is in a form for allowance as the combination of *Kusakabe* and *Pavlin* does not make obvious all of the elements of Claim 2 and its base claim, Claim 1.

Claims 3-7: Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kusakabe* further in view of *Folmsbee*. The Office Action provides that *Kusakabe* discloses a method of selectively providing user access to a network application, but that *Kusakabe* does not disclose a license agreement before issuing the keys or a user of a third party software. The Office Action provides that *Folmsbee* discloses a license agreement and a user of a third party software and that it would have been obvious to modify *Kusakabe* to include a license agreement and a user of a third party software such as that taught by *Folmsbee* in order to have both parties agree within a license agreement before the application is accessed such that the developer is safe from undue usage of the software/system.

As with Claim 2, above, Claims 3-7 depend from independent Claim 1. As shown above, the combination of *Kusakabe* and *Sampson* is improper in forming the obviousness rejection of Claim 1. Because a dependent claim contains all of the limitations of its base claim, including the key fields of Claim 1, Applicants submit that Claims 3-7 are in a form for allowance as the combination of *Kusakabe* and *Folmsbee* does not make obvious all of the elements of each of Claims 3-7 and their base claim, Claim 1.

Claim 9: Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Kusakabe* further in view of *Sampson* and *Folmsbee*. The Office Action indicates that *Kusakabe* discloses a method of selectively providing user access to a network application as discussed above, but does not disclose a common key or a unique key.

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The Office Action provides that *Folmsbee* discloses a common key and *Sampson* discloses unique key. The Office Action further provides that it would have been obvious to modify *Kusakabe* to include a common key such as that taught by *Folmsbee* and a unique key such as taught by *Sampson* in order to have the unique key in place such that each user can access the application with his/her key such that the owner of the application has a record of exactly which entity has accessed the application.

As we have shown above, the combination of *Kusakabe* and *Sampson* is improper, therefore the combination of *Kusakabe* and *Folmsbee* fails to teach, suggest or make obvious all of the elements of this Claim 9. Furthermore, as Claim 9 depends from independent Claim 1, we have shown above that the combination of *Kusakabe* and *Sampson* is improper in forming the obviousness rejection of Claim 1. Because a dependent claim contains all of the limitations of its base claim, including the key fields of Claim 1, Applicants submit that Claim 9 is in a form for allowance as the combination of *Kusakabe* and *Folmsbee* does not make obvious all of the elements of Claim 9 and its base claim, Claim 1.

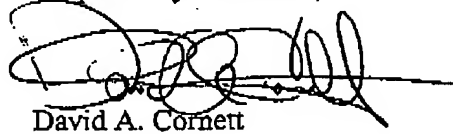
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C. Conclusion


Applicants respectfully submit that the combination of *Kusakabe* and *Sampson* is improper and, as such, no prima facie case of obviousness has been made. Applicants therefore submit that all of the claims (Claims 1-9) are not made obvious by any combination of the cited references and are in a form for allowance. Applicant therefore requests examination and allowance of all the pending claims of the Application. If the Examiner wishes to discuss the application or the comments herein, the Examiner is urged to contact the undersigned by telephone at (404) 881-7846.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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